



ABSTRACT

A method for use in a Generic Packet Radio System backbone network to transport an internet packet destined to a terminal from a gateway support node via a serving support node to a radio network controller. The method comprises for the downstream transportation the steps of: transforming the header into a backbone header; inserting in the backbone header an address of the serving support node and of the radio network controller; forwarding the internet packet after each insertion step to the radio network controller; and keeping track of the address of the terminal during the forwarding by use of an address extension header and by operations on the address extension header during and after forwarding. The upstream transportation is executed in the opposite direction, whereby steps executed during downstream transportation by the gateway support node are now executed during upstream transportation by the radio network controller and vice versa.